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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,032	05/28/2002	Horea-Stefan Culca	521.1014	7295

23280 7590 03/24/2006

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EXAMINER	
ETTEHADIEH, ASLAN	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,032	CULCA, HOREA-STEFAN	
	Examiner	Art Unit	
	Aslan Ettehadieh	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *8,11 and 12* is/are allowed.

6)☒ Claim(s) *5-7,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/62006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, not showing "the master and slave interfaces are capable of being connected via at least one data transmission line", filed 3/6/2006, with respect to the rejection(s) of claim 5 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lo et al. (US 6247082) in view Kohl et al. (US 2001/0031026).

2. Applicant's arguments filed 3/6/2006 have been fully considered but they are not persuasive: "the master and the slave interfaces are capable of being connected via a acknowledgment signal line configured for a transmission of an acknowledgment signal from the slave device to the master device"; Lo discloses the master and the slave interfaces are capable of being connected via a acknowledgment signal line configured for a transmission of an acknowledgment signal from the slave device to the master device (col. 2 lines 26 – 27).

Claim Objections

3. Claims 11 and 12 are objected to because of the following informalities: please insert "as recited in claim 8" after "The method for serial synchronous data transmission". Applicant has disclosed in page 10 of the Remarks section of the applicant's arguments filed 3/6/2006; "New dependent claims 9 – 12". It is assumed the dependent claims 11 and 12 are dependent of claim 8. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (US 6247082) in view of Kohl et al. (US 2001/0031026).

5. Regarding claim 5, Lo discloses a data transmission device (col. 4 lines 48 – 50) for serial (col. 1 line 30) synchronous (col. 2 line 32) data transmission comprising:

a master device including a first arithmetic unit (figure 2 element 100a) and a master interface (figure 2 element 110a); and

a slave device including a second arithmetic unit (figure 2 element 100b) and a slave interface (figure 2 element 110b); wherein:

the master and slave are capable of being connected via at least one data transmission line (figure 2 element 150) and a clock signal line (figure 2 element 124);

the master and the slave interfaces are capable of being connected via a acknowledgment signal line configured for a transmission of an acknowledgment signal from the slave device to the master device (col. 2 lines 26 – 27);

the second arithmetic unit is capable of generating the acknowledgment signal upon completion of a data reading operation (col. 3 line 66 – col. 4 line 6); and

the first arithmetic unit is configured so that a capability of the master device to initiate a further write operation to the slave device is dependent upon a receiving of the acknowledgment signal from the slave device (col. 7 line 57 – col. 8 line 55; where the ready signal is also being interpreted as an acknowledgment signal). Lo is silent about the master and slave interfaces are capable of being connected via at least one data transmission line.

In the same field of endeavor, however, Kohl discloses the master and slave interfaces are capable of being connected via at least one data transmission line (paragraph 18, figure 1).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use the master and slave interfaces are capable of being connected via at least one data transmission line as taught by Kohl in the system of Lo to reduce the amount of processing for the devices thus providing better efficiency in the devices

6. Regarding claim 6, Lo discloses a at least one data transmission line is a single bidirectional data transmission line (figure 2 element 150; where the single communication line shows directional arrows on both ends showing a bidirectional (two directional) type of transportation)

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (US 6247082) in view of Kohl et al. (US 2001/0031026) in further view of Siu et al. (US 5528215).

8. Regarding claim 7, Lo discloses the at least one data transmission line includes a first and a second unidirectional data transmission line (col. 4 lines 53 – 55). Lo is silent about a unidirectional data transmission line.

In the same field of endeavor, however, Siu discloses a unidirectional data transmission line (col. 6 lines 22 – 27).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use a unidirectional data transmission line as taught by Siu in the system of Lo because bidirectional transmission lines use time to set up the direction of transmission and are susceptible to data collision where unidirectional transmission provides for more efficient and reliable data transfer.

9. Claim 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (US 6247082) in view of Kohl et al. (US 2001/0031026) in further view of Gulick (US 6058443).

10. Regarding claim 9, Lo discloses the second arithmetic unit is configured to receive data of the data reading operation from the master device and to generate and send to the master device a receive signal (col. 3 lines 41 – 43). Lo does not disclose a receive bit as only a single bit after a receiving of the data.

In the same field of endeavor, however, Gulick discloses to generate and send a receive bit as only a single bit after a receiving of the data.

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use to generate and send a receive bit as only a single bit after a receiving of the data as taught by Gulick in the system of Lo to decrease information in the transmission to allow for more data to be transmitted

thus providing for a lower bandwidth consumption and/or faster transmission speeds.

11. Regarding claim 10, Lo discloses the first arithmetic unit is configured to generate and send data of the data reading operation to the slave device as a signal (col. 3 lines 41 – 43). Lo does not disclose only a single transmit bit.

In the same field of endeavor, however, Gulick discloses generate and send data of the data reading operation as only a single transmit bit.

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use generate and send data of the data reading operation as only a single transmit bit as taught by Gulick in the system of Lo to decrease information in the transmission to allow for more data to be transmitted thus providing for a lower bandwidth consumption and/or faster transmission speeds.

Allowable Subject Matter

12. Claims 11 and 12 are objected to, but would be allowable if rewritten to overcome the objection above.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aslan Ettehadieh whose telephone number is (571) 272-8729. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on (571) 272-3021.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aslan Ettehadieh
Examiner
Art Unit 2611

AE

MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER